Example 1: Graph the following piecewise function.
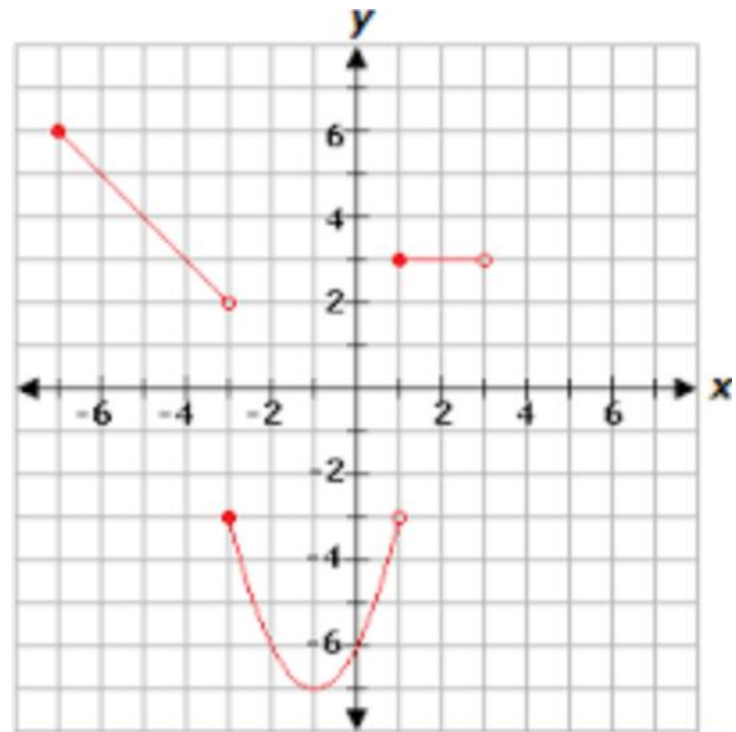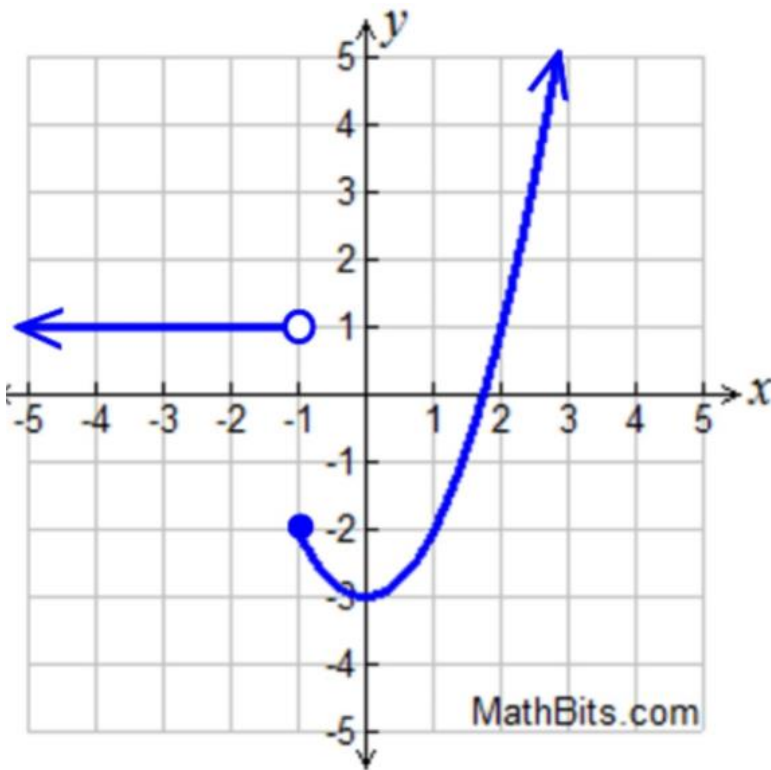
$$f(x) = \begin{cases} 2x - 3, & \text{if } x \leq -2 \\ -2, & \text{if } -2 < x < 1 \\ (x - 3)^2 - 1, & \text{if } 1 \leq x < 5 \end{cases}$$
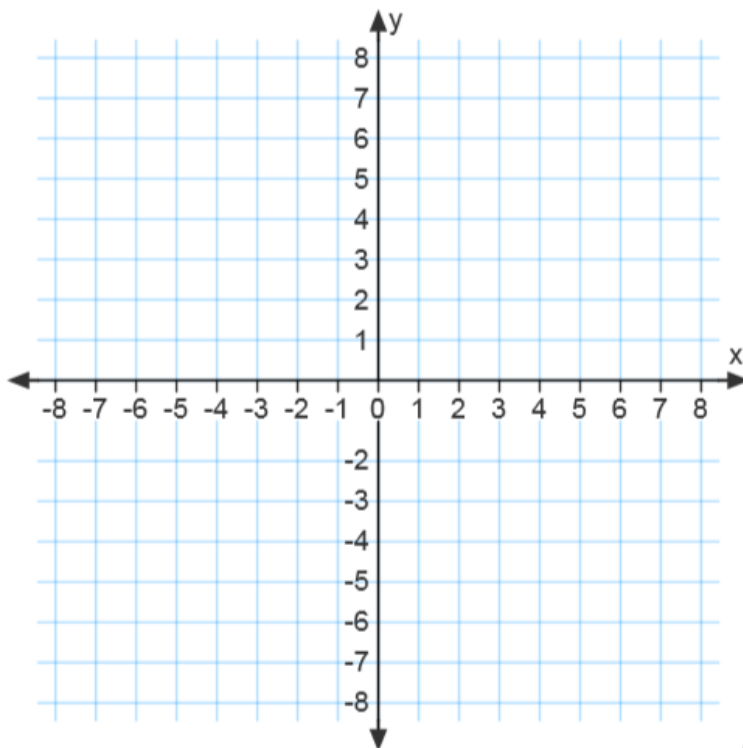
Example 2: Write the piecewise function given the graph below.
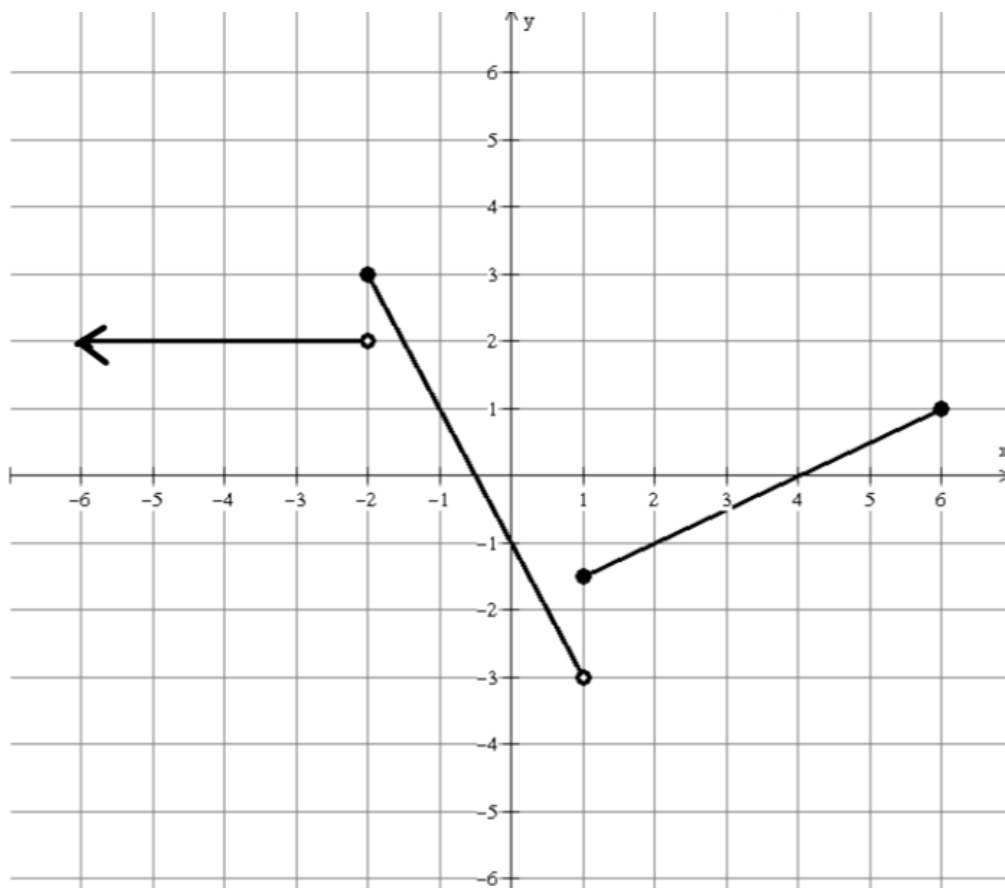
Examples 3 & 4: Write the piecewise function given the graphs below.

MathBits.com

Example 5: Application Problem

At a silk screen shirt company, they charge the following to make shirts:
• An initial charge of $20 to create the silk screen
• $17.00 per shirt for orders of 50 or fewer shirts
• $15.80 per shirt for orders of more than 50 shirts

Write a piecewise function that gives the cost C for an order of x shirts. Graph the function.